

Sub A1  
1. In a computer system, a method of distributing call flow events among a plurality of threads, each thread having an associated call flow event queue in which call flow events queued, the method comprising:

- A. determining a call flow workload level for each of the plurality of threads;
- B. determining that a first of the plurality of threads is inefficiently handling its assigned call flow workload; and
- C. reassigning a call flow event from the call flow event queue associated the first thread to the call flow event queue associated with a second of the plurality of threads.

2. The method according to claim 1 further comprising the step:

- D. processing the call flow events associated with each of the plurality of threads.

3. The method according to claim 1 wherein step C further comprises:

- C.1 removing a call flow event from the call flow event queue associated within the first thread; and
- C.2 placing the removed call flow event in the call flow event queue associated with the second thread.

4. The method according to claim 1 wherein step C further comprises:

- C.1 selecting the second thread in accordance with the number of call flow events in the call flow event queue associated with the second thread.

5. The method according to claim 1 wherein step C further comprises:

- C.1 allocating the call flow events to a thread within the computer system with the least call flow load.

6. The method according to claim 1 wherein step B comprises:

Sub B1 } 2 B.1 determining whether the number of call flow events in the call flow event queue  
3 associated with a thread has exceeded a predetermined criteria.

Sub A2 } 7. The method according to claim 1 wherein step A comprises:  
A.1 2 assigning call flow events among the call flow event queues associated the  
3 respective plurality of threads in the system.

1 8. A computer program product for use with a computer system, the computer  
2 system operatively coupled to a computer network and capable of communicating with  
3 one or more processes over the network, the computer program product comprising a  
4 computer usable medium having program code embodied in the medium, the program  
5 code comprising:

6 (A) program code configured to determine a call flow workload level for each  
7 of the plurality of threads;

8 (B) program code configured to determine that a first of the plurality of  
9 threads is inefficiently handling its assigned call flow workload; and

10 (C) program code configured to reassign a call flow event from the call flow  
11 event queue associated the first thread to the call flow event queue associated  
12 with a second of the plurality of threads.

1 9. The computer program product of claim 8 further comprising program:

2 (D) program code configured to process the call flow events within each of the  
3 plurality of threads.

1 10. The computer program product of claim 8 further comprising:

2 (C.1) program code configured to remove a call flow event from a call flow event  
3 queue associated with the first thread; and

4 (C.2) program code configured to place the removed call flow event on a call flow  
5 event queue of the second thread.

1 11. The computer program product according to claim 8 further comprising;  
2 (C.1) program code configured to select the second thread in accordance with  
3 the number of call flow events in the call flow event queue associated with the second  
4 thread.

Sub B1 }  
1 12. The computer program product according to claim 8 further comprising;  
2 (C.1) program code configured to allocate the call flow events to a thread  
3 within the computer system with the least call flow load.

1 13. The computer program product according to claim 8 further comprising:  
2 (B.1) program code configured to determine whether the number of call flow  
3 events in the call flow event queue associated with a thread has exceeded a  
4 predetermined criteria.

Sub B3 }  
1 14. The computer program product according to claim 8 further comprising:  
2 (A.1) program code configured to assign call flow events among the call flow  
3 event queues associated the respective plurality of threads in the system.

1 15. In a computer system, an apparatus for distributing call flow events among a  
2 plurality of threads, each thread having an associated call flow event queue in which call  
3 flow events queued, the apparatus comprising:  
4 a call flow engine configured execute call flow events associated with one of the  
5 threads;  
6 a call flow manager configured to distribute a plurality of call flow events among a  
7 plurality of threads used for managing the processing of plurality of call flows, n  
8 the call flow manager optimizing the processing of the call flows by determining  
9 which plurality of threads are operating inefficiently and reassigning a portion of

